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UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

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Ex parte CHRISTOPHER W. KEMPIN, ROBERT L. ORR, and
ROSALIND TOY ALLEN RADCLIFFE

_____

Appeal 2009-005080
Application 10/712,677[1]
Technology Center 2100

_____

Before LANCE LEONARD BARRY, ST. JOHN COURTENAY III, and
JAMES R. HUGHES, *Administrative Patent Judges.*

HUGHES, *Administrative Patent Judge.*

DECISION ON APPEAL[2]

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[1] Application filed November 13, 2003. The real party in interest is
International Business Machines Corp. (App. Br. 2.)
[2] The two-month time period for filing an appeal or commencing a civil
action, as recited in 37 C.F.R. § 1.304, or for filing a request for rehearing,
as recited in 37 C.F.R. § 41.52, begins to run from the "MAIL DATE"
(paper delivery mode) or the "NOTIFICATION DATE" (electronic delivery
mode) shown on the PTOL-90A cover letter attached to this decision.

STATEMENT OF THE CASE

Appellants appeal from the Examiner's rejection of claims 1-11 under authority of 35 U.S.C. § 134(a). The Board of Patent Appeals and Interferences (BPAI) has jurisdiction under 35 U.S.C. § 6(b).

We affirm.

Appellants' Invention

Appellants invented a system – including a server, a gateway device, and endpoints – and related method for monitoring the endpoints and communication channels between the endpoints and the gateway device. The gateway communicates with the server and the endpoints, and each endpoint includes a monitoring application for monitoring the integrity of the endpoint. The monitoring application sends a monitoring signal through a particular communication channel to the gateway at predetermined time intervals, which indicates the integrity of the endpoint. If the gateway fails to receive the monitoring signal from the endpoint, the gateway determines the status of the endpoint from a list, and may send a state change message to the server. (Spec. ¶¶ [0008]-[0009].)[3]

Representative Claim

Independent claims 1 further illustrates the invention. It reads as follows:

> 1. A system for monitoring the integrity of a plurality of endpoints and a communication channel between the plurality of endpoints and a gateway device, comprising:

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[3] We refer to Appellants' Specification ("Spec."); Appeal Brief ("App. Br.") filed May 2, 2008; and Reply Brief ("Reply Br.") filed September 24, 2008. We also refer to the Examiner's Answer ("Ans.") mailed July 25, 2008.

an endpoint having a monitoring application for monitoring the integrity of the endpoint, the monitoring application at a predetermined time sending a periodic signal through a communication channel to the gateway device indicating the integrity of the endpoint;

a server having a centralized database listing a status of the endpoint; and

a gateway device in communication with the server and with the endpoint, the gateway device including a monitored list listing the status of the endpoint in communication with the gateway device, the gateway device being configured to send a state change message to the server when the gateway device fails to receive a periodic signal from the endpoint and if the status of the endpoint is either in a Healthy state, which indicates the endpoint is functioning properly, or a Trouble state, which indicates the endpoint has failed once, the gateway device further being configured not to send the state change message to the server upon a failure to receive the periodic signal from the endpoint when the status of the endpoint is in a Removed state, which indicates the endpoint has been removed from the monitored list.

Reference

The Examiner relies on the following reference as evidence of unpatentability:

| Childress | US 2004/0010716 A1 | Jan. 15, 2004 |
| | | (filed Jul. 11, 2002) |

Rejections on Appeal

The Examiner rejects claims 1-6 and 11 under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicants regard as the invention.

The Examiner rejects claims 1-11 under 35 U.S.C. § 102(e) as being anticipated by Childress.

ISSUES

Based on our review of the administrative record, Appellants' contentions, and the Examiner's findings and conclusions, the pivotal issues before us are as follows:

1. Does the Examiner err in concluding that Appellants' usage of the "configured not to send" terminology renders claims 1-6 and 11 indefinite?

2. Does the Examiner err in finding the Childress reference discloses "the gateway device further being configured not to send the state change message to the server upon a failure to receive the periodic signal from the endpoint when the status of the endpoint is in a Removed state" as recited in Appellants' claim 1?

FINDINGS OF FACT (FF)

Appellants' Specification

1. Appellants do not explicitly define a "Removed" state in their Specification. The Specification, however, does describe the functionality of Appellants' monitoring system with respect to the Removed state: "[w]hen an endpoint's status is Removed, the gateway device will no longer send any additional messages regarding this endpoint to the central server. . . . Optionally, the gateway device can remove the endpoint from its monitored list and/or the endpoint list 200 after changing its status to Removed." (¶ [0023].)

Childress Reference

2.   Childress describes a system and method for monitoring the health of networked system components, including a server, gateways and/or managed nodes, and endpoints. (¶ [0032]; Figs. 1B, 2, 6, 7.) Childress' system includes a gateway healthcheck engine that monitors the health of connected endpoints. (¶¶ [0107], [0115].) The endpoints include a monitoring application that periodically sends an upcall message to the endpoint's assigned gateway, indicating that the endpoint is functioning properly. The gateway includes a table or list of all the endpoints connected to the gateway, and the last time the endpoint checked in. The gateway identifies any problem with an endpoint, for example, if the endpoint fails to check in, and sends a message to the server. (¶¶ [0108]-[0112], [0114]-[0115]; Fig. 7.)

3.   Childress produces gateway messages to the server that indicate the occurrence of an event, specifically a Trivoli Enterprise Console (TEC) event – *see* ¶ [0037], in the communication between the gateway and a particular endpoint. The TEC events indicate different levels of severity, depending on the length of time the endpoint fails to communicate with the gateway or how may check-ins the endpoint misses. These event severities include: HARMLESS-indicating normal operation, WARNING-indicating a first threshold has been exceeded, CRITICAL-indicating a second threshold has been exceeded, and FATAL-indicating a third threshold has been exceeded and complete failure of the endpoint. (¶¶ [0096], [0115]-[0116].)

4.   Childress describes that the managed node or gateway logs an error event and determines whether to send a TEC event message to the server. (¶¶ [0119]-[0121]; Fig. 8.) Childress also describes determining if

any additional healthchecks should be performed or healthcheck modules executed. (¶¶ [0061], [0121].) For example, Childress determines if a managed node is operating properly or has failed ("is down"). (¶¶ [0061]-[0062].) If a managed node fails, "no additional healthcheck modules are processed." (¶ [0061].)

ANALYSIS

Issue 1: Rejection of claims 1-6 and 11 under 35 U.S.C. § 112, Second Paragraph

The Examiner rejects claims 1-6 and 11 for being indefinite for failing to particularly point out and distinctly claim the invention; specifically, that the terminology "'capable of not' sending state change" in claims 1 and 11 is indefinite. (Ans. 3, 6-7.) Appellants contend that the claimed limitation is proper. (App. Br. 5-6; Reply Br. 1-2.)

After reviewing the record on appeal, we agree with Appellants and we conclude that those skilled in the art would understand the claim terminology in light of the Specification. Initially, we note that the Appellants amended claims 1 and 11 to remove the "capable of not sending" language and replace it with "configured not to send," in the Amendment dated December 3, 2007, entered by the Examiner in the Advisory Action mailed December 31, 2007. The Examiner does not even address the amended claim language. The Examiner appears to construe the claim limitation so broadly as to be meaningless – in that "[a]ll gateway devices are 'capable of not' sending state change" messages. (Ans. 3.) We find that that the terminology "configured not to send" means arranged to function in a particular way – to conditionally not to send a message under particular circumstances. Accordingly, we construe the claimed feature of "the

gateway device further being configured not to send the state change

message to the server upon a failure to receive the periodic signal from the

endpoint when the status of the endpoint is in a Removed state" to mean that

the gateway is arranged to function in a particular way – to not send the state

change message to the server – upon a failure to receive the periodic signal

from the endpoint when the status of the endpoint is in a Removed state.

While we construe claim limitations by giving the limitations "their broadest

reasonable interpretation," this interpretation is made "in light of the

[S]pecification as it would be interpreted by one of ordinary skill in the art."

In re Am. Acad. of Sci. Tech Ctr., 367 F.3d 1359, 1364 (Fed. Cir. 2004)

(citations omitted). In the context of the disclosure of Appellants'

Specification (FF 1) and the knowledge of those skilled in the art, the

terminology is not indefinite. Thus, we reverse the Examiner's rejection of

claims 1-6 and 11 under 35 U.S.C. § 112, second paragraph.

Issue 2: Rejection of claims 1-11 under 35 U.S.C. § 102(e)

The Appellants contend that the Childress reference fails to disclose

each feature of the rejected claims, in particular "the gateway device further

being configured not to send the state change message to the server upon a

failure to receive the periodic signal from the endpoint when the status of the

endpoint is in a Removed state" as recited in Appellants' claim 1. (*See* App.

Br. 6-9; Reply Br. 2-3.) The Examiner finds that the Childress reference

discloses each feature of Appellants' claim 1, and provides a detailed

explanation as to why Appellants' arguments fail to overcome the

Examiner's anticipation rejection. (Ans. 4-5, 7-9.) Specifically, the

Examiner finds that Childress discloses the disputed feature of not sending

messages to the server when the endpoint status is in the Removed state, in

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that Childress' gateway device is capable of selectively sending or not sending a state change message to the server when the gateway device fails to receive a periodic signal from the endpoint, and the status of the endpoint is "in a Removed state (¶ 096, 'Fatal')" (Ans. 5). (*See* Ans. 4-5). Based on these contentions, we decide the question of whether the Examiner erred in finding the Childress reference discloses a gateway device configured not to send a state change message to a server upon a failure to receive a periodic signal from an endpoint when the status of the endpoint is in a Removed state.

After reviewing the record on appeal, we agree with the Examiner that the Childress reference discloses the disputed feature. We begin our analysis by construing Appellants' disputed claim limitation.

We note that Appellants explicitly define the Healthy state and Trouble state in claim 1: "a Healthy state . . . indicates the endpoint is functioning properly," and "a Trouble state . . . indicates the endpoint has failed once." Appellants, however, do not positively recite in claim 1 how the Removed state is reached. *Cf.* Claim 7. Rather, Appellants describe the Removed state as indicating "the endpoint has been removed from the monitored list," without specifying, in the claim, the process of removing the endpoint from the gateway monitored list. We understand this language to mean that the server database status indicates "Removed," and the gateway does not list the endpoint. Consequently, we are unsure how the gateway makes a determination to send a message with respect to an unlisted (non-existent) endpoint. In other words, while the gateway may be configured not to send a message to the server when it fails to receive a periodic signal from an unlisted endpoint, such functionality does not differentiate the gateway

over the prior art because the gateway is not positively recited in claim 1 as actually determining whether to send a message.

Appellants' also do not explicitly define "a Removed state" in their Specification, but do explain that the gateway device will not send additional messages to a server concerning an endpoint when the endpoint has a Removed status, and that a gateway may remove the endpoint listing from its endpoint list entirely after changing the endpoint status to Removed. (FF 1.) Accordingly, as we explain *supra*, we broadly but reasonably construe Appellants' disputed claim limitation to mean the gateway is arranged not to send (is capable of not sending) the state change message to the server upon a failure to receive the periodic signal from the endpoint, when the endpoint status is in a particular state (a Removed state). This construction is consistent with the cited references, Appellants' Specification, and the knowledge of those skilled in the art at the time of Appellants' invention.

As detailed in the Findings of Fact section *supra*, the Childress reference describes a system for monitoring networked system components, including a server, gateways, and endpoints. Childress' endpoints periodically send an upcall message (a signal) to their respective assigned gateway. The gateway stores a time stamp of the messages in a table that lists the endpoints connected to the gateway, and utilizes the information to determine if an endpoint fails to check in. If an endpoint does not check in, the gateway may selectively send a message to the server, i.e., may alternately determine to send or not send a message. The messages indicate differing levels of severity (events), including CRITICAL events (where first and second time period thresholds have been exceeded) and FATAL

events (indicating complete failure of the endpoint where a third time period threshold has been exceeded). (FF 2-4.)

Thus, we find Childress discloses a gateway that selectively sends or does not send (i.e., arranged not to send, or capable of not sending) a state change message to a server upon a failure to receive the periodic signal from the endpoint, when the endpoint status is in a particular state (either a critical or fatal state). Therefore, a broad but reasonable interpretation of Appellants' claim 1 reads on at least one embodiment of Childress. (*Id.*).

We find Appellants' contrary arguments unpersuasive. Specifically, Appellants mischaracterize Childress as failing to describe a gateway that selectively sends state change messages to a server (Reply Br. 2-3), or the gateway not sending (suppressing) a state change message. (App. Br. 8-9.) We find (*supra*) that Childress discloses not sending a state change message. Further, Appellants' arguments are not commensurate with the scope of their recited claim limitations. Appellants' argue that Childress fails to disclose the gateway not sending the state change message to the server "when the status of the endpoint is in the Removed state." (App. Br. 8.) Appellants also argue that Childress does not describe removing an endpoint from a monitored list:

> the gateway device removes the endpoint from the monitored list and sends a second state change signal to the server indicating the removal of the endpoint. These claims recited a system that changes the state of an endpoint based on both the current state of the endpoint and the non-occurrence of an event relative to the endpoint.

(Reply Br. 3; *see* Reply Br. 2-3.) As we explain *supra*, Appellants' disputed claim limitation merely requires a gateway capable of not sending a message

when an endpoint has a particular state, and/or is not listed in gateway list. Childress' gateway has this capability.

Thus, we find the Childress reference discloses Appellants' disputed claim limitation as recited in Appellants' independent claim 1. Appellants do not separately argue independent claims 7, 10, and 11, or dependent claims 2-6 (dependent on claim 1), or 8 and 9 (dependent on claim 7). Accordingly, we select independent claim 1 as representative of claims 2-11, and we find the Childress reference anticipates these claims for the reasons set forth with respect to representative claim 1. It follows that Appellants do not persuade us of error in the Examiner's anticipation rejection of claims 1-11, and we affirm the Examiner's rejection of these claims.

CONCLUSIONS OF LAW

Appellants have shown that the Examiner erred in rejecting claims 1-6 and 11 under 35 U.S.C. § 112, second paragraph.

Appellants have not shown that the Examiner erred in rejecting claims 1-11 under 35 U.S.C. § 102(e).

DECISION

We reverse the Examiner's rejection of claims 1-6 and 11 under 35 U.S.C. § 112, second paragraph.

We affirm the Examiner's rejection of claims 1-11 under 35 U.S.C. § 102(e).

Because we have sustained the rejection of each claim on appeal with respect to at least one ground of rejection, we affirm the Examiner's decision rejecting claims 1-11.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv).

AFFIRMED

msc

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